

### **REMARKS**

In view of the above amendment, Applicants believe the pending application is in condition for allowance.

Claims 1-21 are now present in this application. Claims 1, 2, and 6 are independent. Amendments have been made to claims 1-6, 8, 10, and 12-18, and claim 21 has been added. Reconsideration of this application, as amended, is respectfully requested.

### **Priority Under 35 U.S.C. § 119**

Applicants thank the Examiner for acknowledging Applicants' claim for foreign priority under 35 U.S.C. § 119, and receipt of the certified priority documents from the International Bureau.

### **Information Disclosure Citation**

Applicants thank the Examiner for considering the references supplied with the Information Disclosure Statements filed on April 17, 2006 and February 16, 2007, and for providing Applicants with initialed copies of the PTO-SB08 forms filed therewith.

### **Drawings**

The Office Action indicates that the drawings are accepted by the Examiner. No further action is necessary at this time.

### **Claim Objections**

The Examiner has objected to claims 1-4, 6, 10, and 12-14 because of several informalities. In order to overcome this objection, Applicants have amended claims 1-6, 8, 10, 12-18 in order to correct the deficiencies pointed out by the Examiner along with correcting similar deficiencies in other claims. Reconsideration and withdrawal of this objection are respectfully requested.

**Rejection Under 35 U.S.C. § 112, 2<sup>nd</sup> Paragraph**

Claims 1, 3-14, and 16-20 stand rejected under 35 U.S.C. § 112, 2<sup>nd</sup> Paragraph. This rejection is respectfully traversed.

The Examiner has set forth certain instances wherein the claim language is not clearly understood.

In order to overcome the rejection of claims 1 and 6, Applicants have amended claims 1 and 6 to correct each of the deficiencies specifically pointed out by the Examiner.

With regards to claims 3 and 12, as amended, Applicants respectfully submit the limitation "wherein each of the plurality of pins substantially has the same sectional shape and sectional area as determined at any point of the overall longitudinal length thereof, and the plurality of pins include said plural types of pins having different sectional areas" is not contradictory. Specifically, each pin of the plurality of pins has a substantially constant sectional shape and area over the length of the pin, while the different types of pins have different sectional areas.

With regards to claims 4, 13, and 14, as amended, Applicants submit that the reference to a link of the plurality of links having a greater pitch and the reference to a pin of the plurality of pins having a greater width are understood to be in relation to the fact that the present invention can have links of different pitches and pins of different widths. Therefore, a link having a greater pitch is understood to be in reference to the links of differing pitches and a pin of greater width is understood to be in reference to pins of differing widths.

Applicants respectfully submit that the claims, as amended, particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Accordingly, reconsideration and withdrawal of this rejection are respectfully requested.

**Rejections Under 35 U.S.C. §§ 102 and 103**

Claims 1-3, 5-9, 11, 12, 15, 16, and 18-20 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Van Rooij. Further, claims 4, 13, 14, and 17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Van Rooij in view of Zimmer. These rejections are respectfully traversed.

Complete discussions of the Examiner's rejections are set forth in the Office Action, and are not being repeated here.

While not conceding the appropriateness of the Examiner's rejection, but merely to advance prosecution of the instant application, Applicants respectfully submit that independent claim 1 has been amended to recite a combination of elements in a power transmission chain entrainable between a first pulley possessing conical sheave surfaces and a second pulley possessing conical sheave surfaces, the power transmission chain including a plurality of links each possessing through-holes, and a plurality of pins inserted through the through-holes for interconnecting the plurality of links, the power transmission chain being operable to transmit power by way of contact between opposite end faces of the pins and the sheave surfaces of the first and second pulleys. All the plurality of pins substantially have the same length in the longitudinal direction thereof, and the plurality of pins include plural types of pins having different rigidities in the longitudinal direction thereof.

Similarly, while not conceding the appropriateness of the Examiner's rejection, but merely to advance prosecution of the instant application, Applicants respectfully submit that independent claim 2 recites a combination of elements in a power transmission chain entrainable between a first pulley possessing conical sheave surfaces and a second pulley possessing conical sheave surfaces, the power transmission chain including a plurality of links, and a plurality of pins for interconnecting the plurality of links, the power transmission chain being operable to transmit power by way of contact between opposite end faces of the pins and the sheave surfaces of the first and second pulleys. All the plurality of pins substantially have the same length in the longitudinal direction thereof, and the plurality of pins include plural types of pins having different sectional shapes or sectional areas as determined on a section perpendicular to the longitudinal direction thereof.

Finally, while not conceding the appropriateness of the Examiner's rejection, but merely to advance prosecution of the instant application, Applicants respectfully submit that independent claim 6 recites a combination of elements in a power transmission chain entrainable between a first pulley possessing conical sheave surfaces and a second pulley possessing conical sheave surfaces and operable to transmit power by way of contact between opposite end faces of plural

chain friction transmission members and the sheave surfaces of the first and second pulleys, the chain friction transmission members arranged along a chain longitudinal direction at predetermined space intervals. The chain includes a plurality of links each possessing first and second through-holes arranged in the chain longitudinal direction, and a plurality of first pins and a plurality of second pins, each of plurality of first pins and plurality of second pins penetrates the first through-hole of one link and the second through-hole of the other link thereby interconnecting the links, adjoining in a chain widthwise direction, in a manner to provide bending in the chain longitudinal direction. The first pin fixed in the first through-hole of the one link and movably fitted in the second through-hole of the other link and the second pin movably fitted in the first through-hole of the one link and fixed in the second through-hole of the other link are brought into relative movement in rolling contact thereby permitting the bending of the chain, and a locus of contact position between the first pin and the second pin is defined by an involute of a circle and the first pins and the second pins are combined to form two or more types of pairs which provide the involutes of base circles having different radii. The plural chain friction transmission members include plural types of chain friction transmission members which have mutually different rigidities against force acting in the chain widthwise direction.

Applicants respectfully submit that these combination of elements as set forth in independent claims 1, 2, and 6 are not disclosed or made obvious by the prior art of record.

In rejecting independent claims 1 and 2, the Examiner states that Van Rooij discloses the plurality of pins 45, 47.

Applicants respectfully submit that the pin 45 and strips 47 of Van Rooij do not correspond to Applicants claimed pins. In particular, Van Rooij specifically states at col. 4, lines 37-39 that "[t]he strips 47 of the transmission chain 31 are **shorter** than the pins 45 **so only the pins are clamped between the cone pulley**, as shown in Fig. 5." (Emphasis added).

In contrast, as set forth in independent claims 1 and 2, "all the plurality of pins substantially have the same length in the longitudinal direction thereof." Because of this configuration, the power transmission chain is operable to transmit power by way of contact between opposite end faces of the pins and the sheave surfaces of the first and second pulleys. Therefore, strips 47 do

not correspond to the plurality of pins as set forth in independent claims 1 and 2. For at least this reason, Van Rooij fails to anticipate independent claims 1 and 2.

Moreover, Van Rooij fails to provide any description that pins 45 have different rigidities as set forth in claim 1. And while Van Rooij does discuss at col. 4, lines 34-36, that the pins 45 may have projections consisting of burrs 59 or slight projections 60 to assist in preventing the outermost links of the chain from outward displacement, there is no discussion that these different pin configurations could be used as part of the same chain. Therefore, the pins 45 do not correspond to the pins of claim 2. For at least these additional reasons, Van Rooij fails to anticipate independent claims 1 and 2.

In rejecting independent claim 6, the Examiner alleges that Van Rooij discloses a plurality of first pins 45 and a plurality of second pins 47 and further states that, because the chain apparatus is similar to applicants', Van Rooij must also describe a locus of contact position between the first pin and the second pin as being defined by an involute of a circle and the first pins and the second pins are combined to form two or more types of pairs which provide the involutes of base circles having different radii.

Applicants respectfully submit that this interpretation of Van Rooij ignores the requirement that the first pins and the second pins are combined to form **two or more** types of pairs which provide the involutes of **base circles** having **different radii**. At best, the combination of the pin 45 and strip 47 provides a **single** pair, having a **single** base circle, having a **single** radius. In other words, Van Rooij discloses a single type of pin 45 and a single type of strip so that there can only be a single pair and not the claimed two or more types of pairs.

Zimmer fails to address the deficiencies identified above with respect to Van Rooij.

Applicants respectfully submit that the combinations of elements as set forth in independent claims 1, 2, and 6 are not disclosed or made obvious by the prior art of record, including Van Rooij and Zimmer, for the reasons explained above. Accordingly, reconsideration and withdrawal of these rejections are respectfully requested.

With regard to dependent claims 3-5 and 7-20, Applicants submit that claims 3-5 and 7-20 depend, either directly or indirectly, from independent claims 1, 2, 6, which are allowable for the reasons set forth above, and therefore claims 3-5 and 7-20 are allowable based on their

dependence from claims 1, 2, 06, as well as for their additionally recited subject matter. Reconsideration and allowance thereof are respectfully requested.

#### **Claim 21**

Claim 21 has been added for the Examiner's consideration. Applicants submit that claim 21 depends from independent claim 2, and is therefore allowable based on its dependence from claim 2, which is believed to be allowable. In addition, claim 21 recites further limitations which are not disclosed or made obvious by the applied prior art references.

Consideration and allowance of claim 21 is respectfully requested.

#### **Additional Cited References**

Since the remaining references cited by the Examiner have not been utilized to reject the claims, but have merely been cited to show the state of the art, no comment need be made with respect thereto.

#### **Conclusion**

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance.


If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone Chad D. Wells, Registration No. 50,875, at (703) 205-8000, in the Washington, D.C. area.

Prompt and favorable consideration of this Amendment is respectfully requested.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Dated: August 26, 2008

Respectfully submitted,

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